

Monitoring temporary pacemaker connections

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A PATIENT WITH myocardial infarction and bifascicular block was admitted to the ICU, where a physician inserted a temporary transvenous pacing catheter. However, the catheter pin design was incompatible with the pacer adapter, so staff members couldn't connect it to the pulse generator. They connected the patient to a transcutaneous pacemaker and transferred him to another facility, but he died shortly after arriving.

What went wrong?

A temporary invasive cardiac pacing system produces an electrical pulse to stimulate the heart. But pacing systems and pacing electrodes vary, and assembled temporary systems may contain equipment from one or more manufacturers. The U.S. market currently offers two different types of cardiac pacing connectors. Without a proper connection to the pulse generator, the device won't pace properly. In this case, the staff used incompatible equipment to assemble the system, creating a faulty connection.

What precautions can you take?

To prevent delaying pacing therapy, careful planning and selection of compatible connectors is needed.

- Take an inventory of your facility's temporary pacing equipment and identify the type of connector design.
- Make sure ahead of time that all pacing components are compatible and fit properly. Remove and replace any incompatible components.
- Ask the manufacturer of your pacing system if it requires adapters and make sure you get the correct ones if it does.
- Report all pacing connection problems to your supervisor and the manufacturer.
- Share with colleagues the FDA's public health advisory "Unsafe Electrode Lead Wires and Patient Cables Used with Medical Devices." You can get a copy at <http://www.fda.gov/cdrh/safety.html> by scrolling down and clicking on 12-28-93. **N**

Although you need to support the adverse event-reporting policy of your health care facility, you may voluntarily report a medical device that doesn't perform as intended by calling MedWatch at 1-800-FDA-1088 (fax: 1-800-FDA-0178). The opinions and statements in this report are those of the author and may not reflect the news of the Department of Health and Human Services. Beverly Albrecht Gallauresi, RN, BS, MPH, coordinates Device Safety.